ASH GROVE CEMENT COMPANY



"WESTERN REGION"

EPA Region 10 Superfund

Releasable

Date:

Document:

July 28, 1995

Mr. Fred Austin Puget Sound Air Pollution Control Agency 110 Union Street Seattle, WA 98101-2038

RE: Letter from Gerald Brown to Fred Austin on March 29, 1993

Dear Mr. Austin,

I have referenced documents (or phone logs) you already have on file supporting our final tabulation of incidents, Table 7, for the period November 1993 through January 1995. We feel that this documentation supports our assertion that the emissions were due to upset conditions in the plant and under WAC 173-400-107 were unavoidable.

These are the incidents from Table 6 that were deleted for the summary Table 7.

- December 1993: The opacity limit violations were due to an unexpected shut down caused by a plugged preheater vessel. There was a phone call made to Ann and a message left for Tom Hudson about this condition. Our *Emission Notification and Complaint Report* for the event is attached. This event should have been removed from Table 5 as a start-up / shutdown and not included in Table 6.
- March 1994: The opacity and NO_X limit violations were due to organic material (coal) that was delivered in the clay portion of the raw materials. The effect of the coal in the clay was not known to have this effect on the opacity. The opacity remained high as kiln feed that was made from the contaminated clay was purged through the system. Attempting to try to burn off the additional organic material to lower the opacity resulted in a hotter, higher NO_X, flame. Refer to the addendum to the March CEM1 and CEM2 report for our action to correct the situation (attached).
- May 1994: The opacity limit violations from this month resulted from a premature dust collector bag failure. There were several failures of individual bags and they were replaced. The whole collector was rebagged when the mode of bag failure was determined to be a condition that could effect the whole collector. Refer to the addendum to the May CEM1 and

3

CEM2 report for our notice of action to correct the situation. (The addendum was erroneously titled April on the first submittal but the dates indicate the May events. The corrected copy that was submitted at a later date is attached.) An error has also been discovered in the tabulation of NO_X excess emissions, the mass emission data was not removed. The number of incidents for the daily concentration of NO_X in May 1994 should be one (1) not three (3).

I hope that this information will be enough to complete the submittal of data related to the plant CEMS violations.

The remaining incidents, Table 7, were not willfully committed, investigations for methods to alleviate the excess emissions were made immediately and measures initiated as soon as possible. The mechanical systems though out the plant that may have any effect on emissions are regularly inspected for wear and proper operation.

Per our discussion of June 27TH we have also filled out your *Emission Monitoring Civil Penalty Worksheet and Recommendation* form with our assessment of the impact of the excess emissions indicated in Table 7.

Sincerely,

Nathan A. Fernow Plant Superintendent

CC:

Ed Pierce Jerry Brown

Enclosures

BUSINESS CONFIDENTIAL

EMISSION

OP-65-3 (REV. 8/93)

NOTIFICATION AND COMPLAINT REPORT ASH GROVE CEMENT – SEATTLE PLANT

If additional space is needed, use back of this form.

NOTIFICATION REPORT:
DATE: 12/11/93 EMISSION-TYPE: Doct TIME STARTED: 230 STOPPED:
SOURCE: 3rd Store Cylone - Pichenter Tower - Plag
PSAPCA OPERATOR: And I for Hodge Miss TIME REPORTED: 9:00 000
IMMEDIATE ACTION TAKEN TO STOP EMISSION: Finistian was caused by
action 7: remove plan from Prehinter. Maintenance activity
+ / / / /
to continue until plus has been removed.
EXTEND BEYOND PLANT BOUNDARIES? VES DIRECTION: WW
DETAIL CAUSE OF EMISSION: Prefix any report succest plus was
the country of the state of the
3.00
TOP TOWN
12/16/93 with air lances, The use of sir lances couse
tmission
ACTION TAKEN TO PREVENT A REOCCURRENCE: Operational up set
LIST OTHERS NOTIFIED: Kin Rose Notifical Husbro
EMISSION COMPLAINT RECEIVED:
DATE: TIME:
NAME: TELEPHONE:
ADDRESS: TELEPHONE:
ADDICES.
DESCRIPTION OF COMPLAINT:
OBSERVED FROM: TIME:
INFORMATION REQUESTED:
INFORMATION PROVIDED:
CALL BACK REQUESTED: CALL BACK OFFERED: ACCEPTED REFUSED
DESCRIBE CALLER'S ATTITUDE:
COMMENTS:
COMMENTS.
PLANT OPERATIONAL STATUS:
PLANT OPERATIONAL STATUS.
WEATHER DATA
PRIOR 24 HOUR PERIOD
TEMP: MAX MIN PRECIPITATION _NO
AT TIME OF COMPLAINT/NOTIFICATION ,
WEATHER CONDITION: (/ Car WIND DIRECTION: (cal / 27)

REPORT PREPARED BY:
TITLE: Mer Sufety r Env
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Addendum to CEM Forms March 1994 Ash Grove Cement

Numbe	er Date	
	SO2 Emissions:	
3	3/1	Kiln preheat phase of startup, unable to add sorbent.
1	3/12	Kiln preheat phase of startup, unable to add sorbent.
7	3/17-3/18	Kiln preheat phase of startup, unable to add sorbent.
		NOx Emissions:
4	3/1	Kiln Startup.
8	3/2	Kiln Startup.
12	3/4-3/5	There was a change in the chemistry of the feed. The feed became easier to burn causing the kiln to heat up.
5	3/8	There was an increase of CO in the system brought in by the kiln feed (see CO emissions). The operator increased the draft to reduce the CO and the increased O2 caused an increase of NOx.
5	3/18	Kiln Startup
		CO Emissions:
16	3/8-3/13	There was an upset caused by an increase of organics in the raw materials. This was identified as coming in through the clay. Once discovered, our clay supplier was
4	3/20-3/21	notified and all recoverable clay was returned to the supplier. There was some feed left over in the bottom of

Opacity:

our silos that showed up a week after the problem had

There were 24 excursions of our 1 hour limit and 9 excursions of the 3 minute limit. These upsets were caused by hydro carbons from the increased organics in the kiln feed mentioned under CO emissions. During the 6 days the excursions took place, we were extremely active verifying that the baghouse was operating properly. On 3/8 a bag broke causing the opacity to increase over 90% for four minutes. This problem was identified and quickly taken care of.

These Experdences should be very the pro-

been dealt with.

Addendum to CEM Forms May 1994 (revised) Ash Grove Cement

Number Date

SO2 Emissions:

50-47 5/1-5/10 5/12, 5/30 5/3/	The sorbent addition system plugged with material. This had to be shut down and cleaned. This was not caused by poor maintenance or operation and should be exempt from penalty. This has been recognized as a serious problem, and the system has been redesigned to combat this. These modifications will be made during July 1994.
1 5/11	With the permit levels adjusted as requested, this would not be a violation.
24 · 5/	The Monitor Labs SO2 analyzer was shown to be incorrect. PSAPCA was notified of this and our subsequent actions. A new analyzer had been previously ordered and was installed late in the month. For the interim, an analyzer was installed from Valid Results.
9 5/17 5/23	
	NOx Emissions:
8 5/6, 5/11 5/23, 5/25	These exceedences occurred during startup and should be exempt from penalty.
1 5/26	With the permit level adjusted as requested, this would not be a violation

Opacity Emissions:

There were numerous occurrences of bag failure during the month. This was in spite of a regular and intensive maintenance routine. It was determined to rebag all eleven compartments at this time. The baghouse was operated according to the manufacturers specifications and the bags failed prematurely. This should be considered and event beyond our control

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Source:	ASH	GROVE	Cemen	it Co		SEATTLE				
Case No:			NOV No:	3284	18	(OPACITY	57	, 1h	R)	
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				Ta <u>Gravity</u>	ble I Criteri	<u>a</u>				
						No (0) P	ossibly (1)	Probab	oly (2) D	efinitely (3)
 Was it a Was the Was the inadequal 	willful or ki violator un violation a ate mainte iolator hav	result of imp nance? ve a history of	ution? ion? n correcting the proper operation f similar violate cally from nor	on or tions?	?	+ + + Total Gravity	+ Criteria Ra	ting	-	
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EMISSION MONITORING CIVIL PENALTY		T AND REC	OMMENDAT	ION
Source: ASH GROVE CEMENT CO - SEATTLE	Plant	5 (7)	7 0	
Case No: NOV No:	19 (084	kity 20	10 Sminut	<u>و)</u>
The following procedure shall be employed in making a recomplete of Agency regulations or permits determined through continuous constitutions answering the questions in Table I are found on the back of benefit to the violator shall include both a gravity and a benamount from Table II below and the economic benefit calculother violations shall consist of a gravity component only and	ommendation for nuous emission this sheet. Civ efit component ated using the E	or assessment or monitoring or il penalties invo and shall be de EPA BEN comp	of civil penalties source testing. olving demonstratemined by aduter model. Civ	for violations Guidance for able economic ding the dollar
	ble I <u>/ Criteria</u>			
 Did the violation result in air pollution? Was it a willful or knowing violation? Was the violator unresponsive in correcting the violation? 	No (0) + +	Possibly (1)	Probably (2)	<u>Definitely (3)</u>
 4. Was the violation a result of improper operation or inadequate maintenance? 5. Did the violator have a history of similar violations? 6. Did the violator benefit economically from noncompliance. 		avity Criteria R	ating	
Gravity Com	able II aponent Penalty		15 10	6 17+
Rating: 5-7 8-9 10 11 Penalty: \$1,000 \$2,000 \$3,000 \$4,000 \$5,000		3 14 000 \$8,000		
If the answer to question #6 in Table I is "Definitely", the es	stimated dollar a	mount of econo	omic benefit det	ermined by the
June 1994 MASSMUM 3			35 % ,	
A Single Event.	·			
	27			
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Evaluator: Date: 7/28/95	Civil Penalty F	Recommendatio	on: \$ 100	00 00

Date:

Checked By:

EMISSION MONITORING CIVIL PENALTY WORKSHEET AND RECOMMENDATION Ash Grove Cement Co - SEATTLE Plant NOV NO: 33657 NO, 700pm @ 10%0_ Case No: ___ The following procedure shall be employed in making a recommendation for assessment of civil penalties for violations of Agency regulations or permits determined through continuous emission monitoring or source testing. Guidance for answering the questions in Table I are found on the back of this sheet. Civil penalties involving demonstrable economic benefit to the violator shall include both a gravity and a benefit component and shall be determined by adding the dollar amount from Table II below and the economic benefit calculated using the EPA BEN computer model. Civil penalties for other violations shall consist of a gravity component only and shall be determined from Table II. Table I Gravity Criteria Definitely (3) Possibly (1) Probably (2) No (0) 1. Did the violation result in air pollution? 2. Was it a willful or knowing violation? 3. Was the violator unresponsive in correcting the violation? 4. Was the violation a result of improper operation or inadequate maintenance? 5. Did the violator have a history of similar violations? 6. Did the violator benefit economically from noncompliance? Total Gravity Criteria Rating Table II Gravity Component Penalty 17+ 14 16 13 8-9 12 5-7 10 11 Ratino: \$10,000 \$11,000 S7.000 \$8,000 \$9,000 \$6.000 \$4,000 \$5,000 \$3,000 \$2,000 Penalty: Benefit Component Penalty If the answer to question #6 in Table I is "Definitely", the estimated dollar amount of economic benefit determined by the EPA BEN computer model is: \$______ (attach calculations). GRAVITY CRITER Comments: 1000 00 Housely Ready, 725 ppinc 1000 2 2 94 - I AN 94 MAR Housely + 94 Hovely April Hovely Repely 4790 poinc 3 events MA Date: 7/28 Civil Penalty Recommendation:

Evaluator.

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EMISSION	MONITOR	ING CIVIL F	PENALTY V	vorks	HEET A	ND REC	OMMEN	IDATIO	N
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GRAVITY CRITERIA #1

MAY 94	MAY 94	MAY 94	MAY 94	APR 94	MAR 94	FEB 94	JAN 94	DEC 93	DEC 93	DEC 93	month	>200%	100-199%	25-99%	0-24%	% OVER	NOX
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790 ppm								725 ppm			READING	>1503	1002-1498	626-997	501-621	501	1day ppm
										NOV 93	month	>200%	100-199%	25-99%	0-24%	% OVER	CO
										0	POINTS	ω	2	_	0	POINTS	
							11			1208 ppm	READING	>314/	2098-3136	1311-208/	1049-1300	1049	8 hr ppm
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